

Screening Site Inspection  
Final Report  
for

A. E. Staley Manufacturing Company  
ILD 005 104 781

May 19, 1993

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## **1.0 Introduction**

On August 7, 1991, B&V Waste Science and Technology Corp. was authorized by approval of the work plan by the U.S. Environmental Protection Agency (USEPA) Region V, to conduct a screening site inspection (SSI) of the A. E. Staley Manufacturing Company (Staley) landfill in Macon County, Illinois.

The site was initially placed on the Comprehensive Environmental Response, Compensation, and Liability Act Information System (CERCLIS) in August 1990 as a result of a request for discovery action initiated by the Illinois Environmental Protection Agency (IEPA).

The site received its initial Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) evaluation in the form of a preliminary assessment (PA) report completed by Sheila Murphy, IEPA, on July 19, 1990. The sampling portion of the SSI was conducted on January 7, 1992, when a field team collected three surface water and five soil samples.

The purposes of the SSI have been stated by USEPA in a directive outlining pre-remedial program strategies. The directive states:

All sites will receive a screening SI to 1) collect additional data beyond the PA to enable a more refined preliminary HRS (Hazard Ranking System) score, 2) establish priorities among sites most likely to qualify for the NPL (National Priorities List), and 3) identify the most critical data requirements for the listing [expanded] SI step. A screening SI will not have rigorous data quality objectives (DQOs). Based on the refined preliminary HRS score and other technical judgement factors, the site will then either be designated as NFRAP (no further remedial action planned) [currently designated SEA (site evaluation accomplished)], or carried forward as an NPL listing candidate. A listing [expanded] SI will not automatically be done on these sites. First, they will go through a management evaluation to determine whether they can be addressed by another authority such as RCRA (Resource Conservation and Recovery Act)... Sites that are designated NFRAP [SEA] or deferred to other statutes are not candidates for a listing [expanded] SI.

The listing [expanded] SI will address all the data requirements of the revised HRS using field screening and NPL level DQOs. It may also provide needed data in a format to support remedial investigation work plan development.

## **2.0 Site Background**

### **2.1 Introduction**

This section includes information obtained over the course of the SSI and previous activities involving this site.

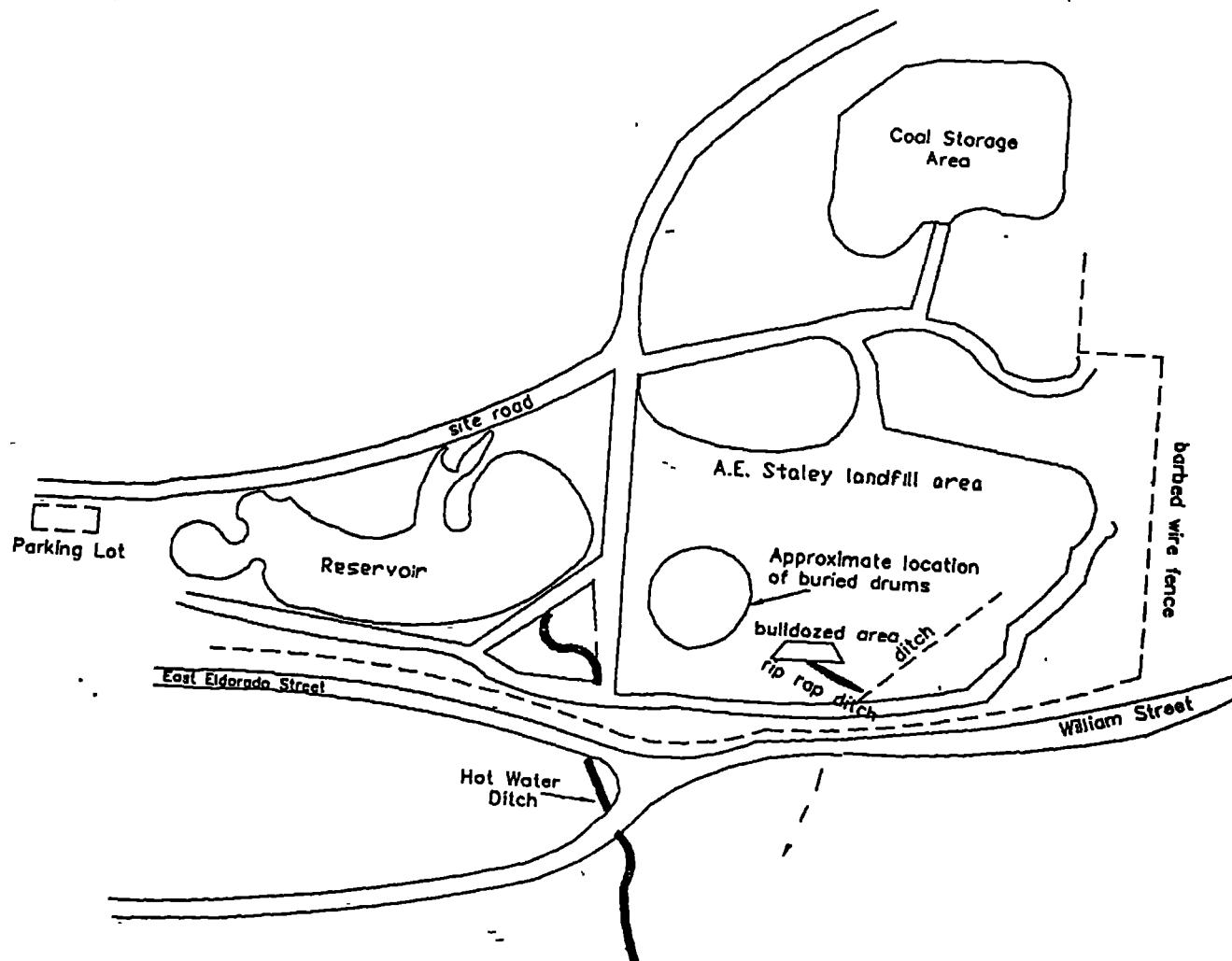
### **2.2 Site Description**

The A. E. Staley Manufacturing Company (Staley) is at 2200 East Eldorado Street, Decatur, Illinois. The portion of the Staley property that was used as a landfill is the subject of this SSI. The landfill is located north of William Street Road (Illinois State Route 105) in the southeast quarter of the southwest quarter of Section 7, and the northeast quarter of the northwest quarter of Section 18, and part of the northwest quarter of the northeast quarter of Section 18, both sections in Township 16 North, Range 3 East of the Third Principal Meridian, Macon County, Illinois. Figure 2-1 presents the general site location. Figure 2-2 shows the general site layout.

The landfill site occupies approximately forty acres of the 2,100-acre Staley facility complex. The area is generally open and clear of large trees and brush. The majority of the ground surface is sparsely covered with grass and weeds. The landfill surface is relatively flat in the center, sloping gently along the perimeter to the south, west, and east. A southwesterly flowing ditch drains surface water runoff from the east side of the landfill. A "hot water ditch," which channels non-contact cooling water from the Staley plant to Lake Decatur, is located adjacent to the southwest corner of the landfill. Outflow from a Staley-owned reservoir west of the landfill flows southeast through the hot water ditch, eventually draining into Lake Decatur.

Portions of the south central area of the landfill have been regraded because of surface water erosion. An abandoned coal storage area borders the landfill to the north. Residential areas border the landfill to the east and are separated from the Staley facility by a chain link fence. William Street (Illinois State Route 105) borders





Source: Modified from IEPA, 1990

Not to Scale



Figure 2-2  
Site Sketch

A.E. Staley Manufacturing Company  
Decatur, Illinois

B&V Waste Science and Technology Corp.

in the onsite landfill. The landfill was used for disposal of general plant and process waste from the Staley facility. Staley is a major corn refiner, producing sweeteners, starches, ethanol, animal feeds, food ingredients, and corn oil. Table 2-1 summarizes the potentially hazardous substances that could be contained within the solid residue.

Mercury bearing waste was reportedly generated by Staley operations (IEPA, 1985b). This waste is described as "mercury lunchroom waste" (IEPA, 1985b). Specific information (quantities, production, storage) regarding mercury bearing waste is not available.

The ownership history of the Staley site is summarized below:

<u>Owner</u>	<u>Date(s) of Ownership</u>
Tate & Lyle, PLC	1988 - Present
Staley Corporation	1906 - 1988
Pratt Cereal Oil Co.	Before 1906
Wellington Starch Works	Before 1906

Apparently, the site has been used to manufacture food ingredients and additives since the late 1800s.

### ***2.3.2 Summary of Onsite Environmental Work***

No onsite environmental work, such as remedial projects or removal actions are known to have been performed on the landfill site. Regrading of the landfill was done to repair surface erosion along the southern portion of the site before the site reconnaissance.

In 1986, the IEPA informed Staley it was in apparent violation of 35 Illinois Administrative Code 722.111, in part for lack of a hazardous waste determination for the fatty alcohol residue in drums buried in the Staley landfill (IEPA, 1986a).

The IEPA acknowledged resolution of the apparent violation in August 1986 (IEPA, 1986b).

On June 29, 1990, IEPA conducted a preliminary assessment of the site. The assessment focused on the closure of the onsite landfill. The constituents of the process waste are believed to present a potential hazard to groundwater and surface water.

## **2.4 Applicability of Other Statutes**

The landfill is listed in the Illinois CERCLIS list (USEPA, 1992a). Staley's Decatur facility is listed as a RCRA notifier (USEPA, 1992b); however, the listing is for the entire facility and does not specifically cite the landfill.

Staley holds a current National Pollutant Discharge Elimination System (NPDES) permit to discharge non-contact cooling water to Lake Decatur through the hot water ditch (IEPA, 1989). The NPDES permit does not cover landfill operations, but the hot water ditch is adjacent to the landfill.

## **3.0 Site Inspection Activities and Analytical Results**

### **3.1 Introduction**

This section outlines procedures used and observations made during the SSI conducted at the Staley site. Sampling activities were conducted in accordance with the Quality Assurance Project Plan (QAPjP), dated September 27, 1991.

Appendix B presents the USEPA Potential Hazardous Waste Site Inspection Report (Form 2070-13).

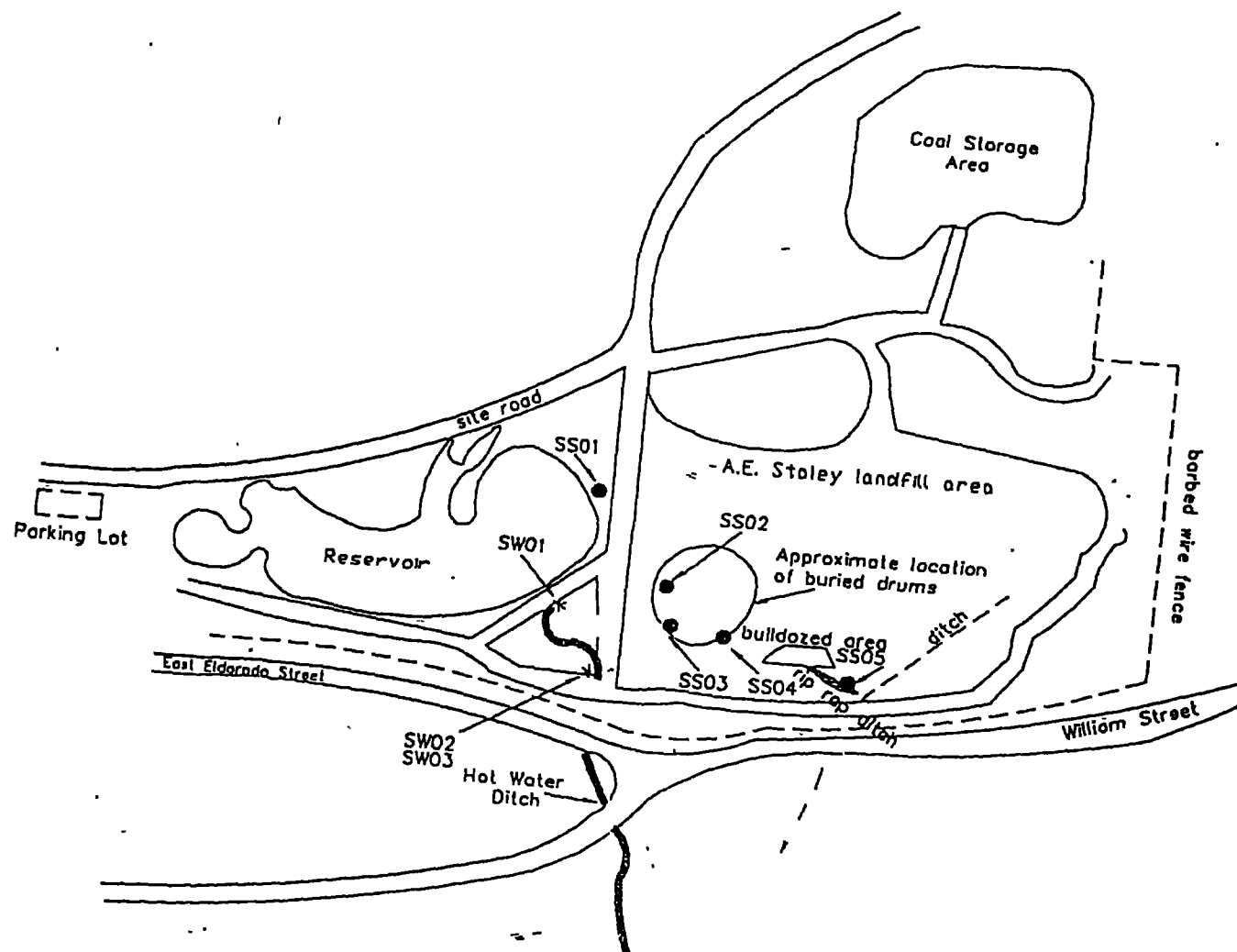
Samples collected for this SSI were analyzed for organic and inorganic substances contained on the USEPA Target Compound List (TCL) and Target Analyte List (TAL) by USEPA contract laboratory program (CLP) participant laboratories. Appendix C presents the TCL and TAL. Appendix D presents a summary of all analytical data generated by SSI sampling. Appendix E contains photographs of the site and sample locations.

### **3.2 Site Reconnaissance**

On September 17, 1991, a site reconnaissance of the Staley landfill was conducted. This visit included a visual inspection of the site to determine the site status, delineate facility activities, identify potential sampling locations, and to determine any health or safety hazards.

### **3.3 Site Representative Interview**

Lauren W. Laabs, environmental science manager; Edward E. Salch, safety and environmental engineer; and Robert H. Marshall, environmental engineer, were interviewed by the reconnaissance team on September 17, 1991, at the Staley site in Decatur, Illinois. The reconnaissance team discussed the purpose of the SSI with Staley representatives, and gathered site-specific information.



Source: Modified from IEPA, 1990

Not to Scale



Figure 3-1  
Site Sketch

A.E. Staley Manufacturing Company  
Decatur, Illinois

B&V Waste Science and Technology Corp.

### **3.6 Analytical Results**

Observed releases of TAL and TCL substances were detected in samples SW03, SS02, and SS05. Pesticide data was determined to be unusable by the USEPA, and is not addressed in this report. Figure 3-1 presents sample locations.

Sample SW03 is located in the hot water ditch at the southwestern corner of the landfill. SW03 documents the presence of arsenic in surface water adjacent to the landfill in excess of upstream background levels.

Two soil samples (SS02 and SS05) established observed releases. SS02 was collected in the western part of the landfill area where drums were allegedly buried. SS05 was collected on the eastern side of the landfill, at a point close to the ditch that captures surface runoff from that side of the landfill. With the exception of two compounds, both samples contained the same suite of semi-volatile organic compounds and calcium. Specific compounds are listed in the next section.

### **3.7 Key Samples**

"Key samples" are those samples containing substances in sufficient concentration to document an observed release. Table 3-2 identifies key samples taken during the SSI.

## **4.0 Characterization of Sources**

### **4.1 Introduction**

Analytical data generated in this SSI document the release of TCL and TAL substances to surface water and soil. Using the historical information on the experiment which produced the drummed wastes and information obtained during field investigation, three potential sources can be identified: the landfill cell areas, the drums which received the experiment wastes, and the cover soil found to contain low concentrations of CERCLA-regulated substances.

### **4.2 The Landfill Cell Areas/Drums**

#### **4.2.1 Description**

It is assumed that landfill construction proceeded by the progressive excavation of pits or "cells" which were systematically filled with plant wastes with each days refuse covered by a thin layer of soil. Use of the area as landfill began in 1961 and continued into the early to mid-1980s; closure occurred in 1987. No records of the nature of materials placed in the landfill are known to the ARCS contractor except a 1987 analysis of a fuel waste reported to contain 2.6 ppb mercury.

#### **4.2.2 Waste Characteristics**

The possible identification of the potential wastes within the landfill cells may be derived from three sources of information. The local union officials claimed to know certain chemicals were dumped in the landfill and these are included in the list in Table 2-1. Staley reports to IEPA document the use of Methanol and Butanol [a trade name for n-butyl alcohol] in the surfactant experiments. The analyses of two of the soil samples from the landfill cover showed the presence of low concentrations of nine semivolatile organic compounds.

A potential exists for substances detected in onsite soil samples to leach through subsurface soils to groundwater. The surface water and air pathways may be affected, if soil bound substances are entrained by overland flow or wind action and transported to nearby areas.

#### **4.4 Other Potential Sources Within One Mile**

A review of USEPA CERCLIS and RCRA lists revealed two other potential sources of release within a one mile radius of the landfill site (USEPA, 1992a; 1992b):

- A. E. Staley Manufacturing Company  
2200 Eldorado Street  
Decatur, Illinois  
RE: underground hexane storage tank
- Archer Daniels Midland Company  
Corn Sweeteners Division Alcohol Plant  
4666 Faries Parkway  
Decatur, Illinois

Review of available records and documentation regarding waste disposal practices at Staley indicate a potential source area may exist near the landfill area. Steel drums containing process waste were temporarily stored in a gravel parking lot on Staley property west of the reservoir and landfill. Of the 504 drums, 208 were landfilled in 1985, and the remainder were shipped offsite to the Acme Company in Chicago, Illinois, for reconditioning (IEPA, 1985a). No releases from the stored drums have been documented; however, their two year presence near the landfill establishes a potential source for many of the same substances detected in the landfill soil samples. Figure 2-2 shows the approximate location of the steel drum burial area and the gravel parking lot where the drums were stored.



## **5.0 Discussion of Migration Pathways**

### **5.1 Introduction**

This section includes information useful in analyzing the potential impact of constituents found at the Staley site on the four migration pathways (groundwater, surface water, air, and soil).

### **5.2 Groundwater**

Groundwater samples were not collected because of the absence of monitoring wells at the Staley landfill and the lack of private wells in the immediate vicinity.

A limited amount of near-site geologic data is available. An underground storage tank investigation performed by Ground Water Technology, Inc., (1991) took place on Staley property nearly one mile west of the landfill site. Boring logs of monitoring wells installed during this investigation indicate a complex assemblage of clay, sand, and silt units to a depth of 23 feet. Lithological unit descriptions in the logs suggest a large degree of lateral variability in sediments, over distances of less than one hundred feet.

The site is located on the upland adjacent to the Sangamon River Valley. Permeable sand and gravel units in this valley have a typical thickness of 15 to 40 feet and form a significant aquifer in Macon County (Bergstrom and others, 1976). On the upland, however, sand and gravel occur as discontinuous bodies usually less than 15 feet thick and separated by glacial till (Selkregg and Kempton, 1958; Bergstrom and others, 1976).

Berg and others (1984) rank aquifer susceptibility to potential contaminant infiltration near the site as low, because of at least 20 feet of relatively impermeable silty and clayey material at the surface.

Table 5-1 presents the population within a four mile radius believed to use private wells. The approximate target population for each distance ring was estimated by counting the number of structures within each distance ring on

Table 5-2 estimates the population within fifteen downstream miles of the Staley facility served by a public water supply.

<p>Table 5-2 Public Water Supply Sources Within Fifteen Downstream Miles of the Staley Facility</p>				
Distance/Direction from Site	Source Name	Location of Source	Approximate Population Served	Source Type
Approximately four miles southwest of the site.	Decatur Public Water Supply	South end of Lake Decatur, near Dam	26,400	Surface Water

Lake Decatur, southeast of the landfill site, receives all runoff from near the landfill. Lake Decatur is a dammed reach of the southwesterly flowing Sangamon River. The city of Decatur maintains two surface water intakes on Lake Decatur to supply drinking water to their residents and those of Mt. Zion, Illinois (City of Decatur, 1991). One intake is upstream of the landfill's overland flow probable point of entry to Lake Decatur; the other is approximately four miles downstream, near the Lake Decatur dam. The downstream intake furnishes approximately eighty-five percent of the municipal water supply (City of Decatur, 1992a). The city of Decatur water supply system serves a population of 31,063 (City of Decatur, 1992b).

An observed release of arsenic to surface water is established in the hot water ditch near the landfill. At least 85 percent of the population served by Decatur's municipal water system are potential targets of the arsenic release.

No other public water supply source from surface water was identified within fifteen downstream miles of the landfill.

No critical habitats are known to exist within a four mile radius of the site (Illinois Department of Conservation, 1992). It is not known if critical habitats exist in or along the Sangamon River, between 4 and 15 miles downstream from the site.

## **6.0 References**

- Berg, R. C., and Kempton, J. P., 1988, "Stack Unit Mapping of Geologic Materials in Illinois to a Depth of 15 Meters," Illinois State Geological Survey, Circular 542.
- Berg, R. C., Kempton, J. P., and Cartwright, K., 1984, "Potential for Contamination of Shallow Aquifers in Illinois," Illinois State Geological Survey, Circular 532.
- Bergstrom, R. E., Piskin, K., and Follmer, L. R., 1976, Geology for Planning in the Springfield-Decatur Region, Illinois: Illinois State Geological Survey, Circular 547.
- City of Decatur, 1991, Jim Mayhugh, Water Production Manager, Decatur Water Resources, in personal communication to John Noyes, B&V Waste Science and Technology Corp., December 16.
- City of Decatur, 1992a, Jim Mayhugh, Water Production Manager, Decatur Water Resources, in personal communication to John Noyes, B&V Waste Science and Technology Corp., April 1.
- City of Decatur, 1992b, Josephine Ricks, Decatur Water Department, in personal communication to John Noyes, B&V Waste Science and Technology Corp., April 1.
- Ground Water Technology, Inc., 1991, Subsurface Hexane Assessment for A. E. Staley Manufacturing Facility, Decatur, Illinois, January 11.
- Illinois Department of Conservation, 1992, Glen Kruse, Project Manager, in letter to John Noyes, B&V Waste Science and Technology Corp., July 2.
- Illinois Environmental Protection Agency (IEPA), 1985a, Richard Johnson, Field Operations Section, Division of Land Pollution Control, Central Region, in memorandum to Land Division File, LPC #1150150032-Macon County-Decatur/Staley-ILD005104781, November 15.
- IEPA, 1985b, RCRA Inspection Report for A. E. Staley Manufacturing Company - Decatur, Illinois, USEPA ID. No. ILD005104781.
- IEPA, 1986a, Mark A. Haney, Manager, Facilities Compliance Unit, Division of Land Pollution Control, in compliance inquiry letter to Richard Dickinson, A. E. Staley Manufacturing Company, March 28.

**Appendix A**

**Site 4-Mile Radius Map and 15-Mile Surface Water Route Map**

**A. E. Staley Manufacturing Company**

**Appendix F**

**Representative Well Logs**

**A. E. Staley Manufacturing Company**

**Appendix B**

**USEPA Form 2070-13**

**A. E. Staley Manufacturing Company**



# Site Inspection Report



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

IL 005104781

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

<b>01 PHYSICAL STATES</b> (Check all that apply) <input checked="" type="checkbox"/> A SOLID <input type="checkbox"/> B POWDER FINES <input checked="" type="checkbox"/> C SLUDGE <input type="checkbox"/> D OTHER _____ (Specify)	<b>02 WASTE QUANTITY AT SITE</b> (Measure of waste quantities must be independent) TONS _____ CUBIC YARDS _____ NO. OF DRUMS _____	<b>03 WASTE CHARACTERISTICS</b> (Check all that apply) <input checked="" type="checkbox"/> A TOXIC <input type="checkbox"/> B CORROSIVE <input type="checkbox"/> C RADIOACTIVE <input checked="" type="checkbox"/> D PERSISTENT <input type="checkbox"/> E SOLUBLE <input type="checkbox"/> F INFECTIOUS <input type="checkbox"/> G FLAMMABLE <input checked="" type="checkbox"/> H IGNITABLE <input type="checkbox"/> I HIGHLY VOLATILE <input type="checkbox"/> J EXPLOSIVE <input type="checkbox"/> K REACTIVE <input type="checkbox"/> L INCOMPATIBLE <input type="checkbox"/> M NOT APPLICABLE
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III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS	UNKNOWN		
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS	UNKNOWN		
IOC	INORGANIC CHEMICALS	UNKNOWN		
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS	UNKNOWN		

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
	BENZO (A) - ANTHRACENE	000056-55-3	LANDFILL	1300	mg / Kg
	BENZO (A) PYRENE	000050-32-8		1600	mg / Kg
	BENZO (B) - FLUORANTHENE	000205-99-2		1600	mg / Kg
	BENZO (K) - FLUORANTHENE			970	mg / Kg
	CALCIUM			54,300	mg / Kg
	Di-n-BUTYLPHTHALATE			530	mg / Kg
	CHRYSENE	000218-01-9		2000	mg / Kg
	FLUORANTHENE	000206-44-8		3500	mg / Kg
	PHENANTHRENE	000085-01-8		3100	mg / Kg
	PYRENE	000129-00-0		2500	mg / Kg
	ARSENIC	007440-38-2	✓	4.6	mg / L

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references e.g., State Dept. Bureau analysis reports)

SSIR, USEPA





POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

ILD 005104781

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE. \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

NO DOCUMENTED DAMAGE TO FLORA WAS DOCUMENTED.

01 ☐ K. DAMAGE TO FAUNA  
04 NARRATIVE DESCRIPTION (Include address of source)

02 ☐ OBSERVED (DATE. \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

NO DAMAGE TO FAUNA WAS DOCUMENTED.

01 ☒ L. CONTAMINATION OF FOOD CHAIN  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE. \_\_\_\_\_)

☒ POTENTIAL

☐ ALLEGED

SURFACE WATER CONTAMINATION DOCUMENTED THROUGH SSI SAMPLING.

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES  
(Solid Aqueous/Sludges Leaking drums)

02 ☐ OBSERVED (DATE. \_\_\_\_\_)

☒ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED \_\_\_\_\_ 04 NARRATIVE DESCRIPTION

THE CONDITION OF DRUMMED WASTE, AS WELL AS THE DRUMS, IS UNKNOWN. THE POTENTIAL FOR RELEASE EXISTS.

01 ☐ N. DAMAGE TO OFFSITE PROPERTY  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE. \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

NO DAMAGE TO OFFSITE PROPERTY WAS DOCUMENTED.

01 ☐ O. CONTAMINATION OF SEWERS STORM DRAINS WWTPs  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE. \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

CONTAMINATION OF SEWERS, STORM DRAINS OR WWTPS IS UNKNOWN AND WAS NOT OBSERVED.

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE. \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

A.E. STALEY HAD PERMITS FOR BURIAL AT THE SITE.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: 590 (WITHIN 4 MILES)

IV. COMMENTS

V. SOURCES OF INFORMATION (Cite specific references e.g. State EPA Region Division 100011)

ILLINOIS STATE WATER SURVEY  
IEPA PRELIMINARY ASSESSMENT  
USGS TOPOGRAPHIC MAPS



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

IL 005104781

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY  
(Check all that apply)

SURFACE WELL  
COMMUNITY A. ☐ B. ☒  
NON-COMMUNITY C. ☐ D. ☒

02 STATUS

ENDANGERED AFFECTED MONITORED  
A. ☐ B. ☐ C. ☐  
D. ☐ E. ☐ F. ☐

03 DISTANCE TO SITE

A. 4 (mi)  
B. (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☐ A. ONLY SOURCE FOR DRINKING

☒ B. DRINKING

(Other source is available)

COMMERCIAL INDUSTRIAL IRRIGATION  
(No other water sources available)

☐ C. COMMERCIAL INDUSTRIAL IRRIGATION

(Limited other source available)

☐ D. NOT USED, UNUSABLE

02 POPULATION SERVED BY GROUND WATER 26,400

03 DISTANCE TO NEAREST DRINKING WATER WELL 4 (mi)

04 DEPTH TO GROUNDWATER

75 (ft)

05 DIRECTION OF GROUNDWATER FLOW

S/SW

06 DEPTH TO AQUIFER  
OF CONCERN

75 (ft)

07 POTENTIAL YIELD  
OF AQUIFER

(gpd)

08 SOLE SOURCE AQUIFER

☐ YES ☒ NO

09 DESCRIPTION OF WELLS (including usage, depth and location relative to population and buildings)

10 RECHARGE AREA

☐ YES

COMMENTS

☐ NO

11 DISCHARGE AREA

☐ YES

COMMENTS

☐ NO

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

☒ A. RESERVOIR RECREATION  
DRINKING WATER SOURCE

☒ B. IRRIGATION ECONOMICALLY  
IMPORTANT RESOURCES

☐ C. COMMERCIAL INDUSTRIAL

☐ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:

DECATUR RIVER

AFFECTED

DISTANCE TO SITE

☐ 1/2 (mi)  
☐ (mi)  
☐ (mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE

A. 110  
NO OF PERSONS

TWO (2) MILES OF SITE

B. 350  
NO OF PERSONS

THREE (3) MILES OF SITE

C. 330  
NO OF PERSONS

02 DISTANCE TO NEAREST POPULATION

1/4 - 1/2 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE

2500+

04 DISTANCE TO NEAREST OFF-SITE BUILDING

1/4 (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site e.g. rural village densely populated urban area)

0 - 1/4 20 3-4 150  
1/4 - 1/2 30 TOTAL 590  
1/2 - 1 80  
1 - 2 240  
2 - 3 90



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 8 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION

01 STATE 02 SITE NUMBER  
ILD 005104781

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER			
SURFACE WATER	3	NORTHERN LABORATORIES, VALPARAISO, IN WADSWORTH ALERT LABS, NORTH CANTON, OH	RECEIVED
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL	5	SAME AS ABOVE	RECEIVED
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS

IV. PHOTOGRAPHS AND MAPS

01 TYPE <input checked="" type="checkbox"/> GROUND <input type="checkbox"/> AERIAL	02 IN CUSTODY OF USEPA FILES <small>Name of organization or individual</small>
03 MAPS <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	04 LOCATION OF MAPS USEPA FILES

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

VI. SOURCES OF INFORMATION (Cite specific references e.g. State Map, Sample Analysis Reports)

USEPA FILES  
USEPA SSI REPORT



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION

01 STATE 02 SITE NUMBER  
ILD 005104781

II. CURRENT OPERATOR (Provide if different from owner)

OPERATOR'S PARENT COMPANY (If applicable)

01 NAME TATE & LYLE, PLC	02 D+B NUMBER	10 NAME	11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD, etc.) 2200 E. ELDERADO ST.	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD, etc.)	13 SIC CODE
05 CITY DECATUR	06 STATE IL	07 ZIP CODE 62525	14 CITY 15 STATE 16 ZIP CODE
08 YEARS OF OPERATION 1988 to Present	09 NAME OF OWNER		

III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from owner)

PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)

01 NAME STALEY CORPORATION	02 D+B NUMBER	10 NAME	11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD, etc.)	13 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	14 CITY 15 STATE 16 ZIP CODE
08 YEARS OF OPERATION 82	09 NAME OF OWNER DURING THIS PERIOD		
01 NAME PRATT CEREAL OIL CO	02 D+B NUMBER	10 NAME	11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD, etc.)	13 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	14 CITY 15 STATE 16 ZIP CODE
08 YEARS OF OPERATION UNKNOWN	09 NAME OF OWNER DURING THIS PERIOD		
01 NAME WELLINGTON STARCH WORKS	02 D+B NUMBER	10 NAME	11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD, etc.)	13 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	14 CITY 15 STATE 16 ZIP CODE
08 YEARS OF OPERATION UNKNOWN	09 NAME OF OWNER DURING THIS PERIOD		

IV. SOURCES OF INFORMATION (Cite specific references, e.g., State (Res. Sample Analysis Reports))

USEPA FILES / SSI REPORT



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION

01 STATE | 02 SITE NUMBER  
ILD | 005104781

II. ON-SITE GENERATOR

01 NAME		02 D+B NUMBER	
03 STREET ADDRESS (P O Box, RFD #, etc.)		04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	

III. OFF-SITE GENERATOR(S)

01 NAME		02 D+B NUMBER		01 NAME		02 D+B NUMBER	
03 STREET ADDRESS (P O Box, RFD #, etc.)		04 SIC CODE		03 STREET ADDRESS (P O Box, RFD #, etc.)		04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE		05 CITY	06 STATE	07 ZIP CODE	
01 NAME		02 D+B NUMBER		01 NAME		02 D+B NUMBER	
03 STREET ADDRESS (P O Box, RFD #, etc.)		04 SIC CODE		03 STREET ADDRESS (P O Box, RFD #, etc.)		04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE		05 CITY	06 STATE	07 ZIP CODE	

IV. TRANSPORTER(S)

01 NAME		02 D+B NUMBER		01 NAME		02 D+B NUMBER	
03 STREET ADDRESS (P O Box, RFD #, etc.)		04 SIC CODE		03 STREET ADDRESS (P O Box, RFD #, etc.)		04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE		05 CITY	06 STATE	07 ZIP CODE	
01 NAME		02 D+B NUMBER		01 NAME		02 D+B NUMBER	
03 STREET ADDRESS (P O Box, RFD #, etc.)		04 SIC CODE		03 STREET ADDRESS (P O Box, RFD #, etc.)		04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE		05 CITY	06 STATE	07 ZIP CODE	

V. SOURCES OF INFORMATION (Cite specific references to all data used, sample analysis, records)

--	--



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE 02 SITE NUMBER  
ILD 005104781

II. PAST RESPONSE ACTIVITIES

01 <input type="checkbox"/> A. WATER SUPPLY CLOSED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> B. TEMPORARY WATER SUPPLY PROVIDED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> C. PERMANENT WATER SUPPLY PROVIDED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> D. SPILLED MATERIAL REMOVED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> E. CONTAMINATED SOIL REMOVED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input checked="" type="checkbox"/> F. WASTE REPACKAGED 04 DESCRIPTION WASTE DRUMS WAS DECONTAMINATED & COLLECTED TO RAIL CAR. DECONTAMINATED DRUMS LANDFILLED	02 DATE 1985	03 AGENCY _____
01 <input type="checkbox"/> G. WASTE DISPOSED ELSEWHERE 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input checked="" type="checkbox"/> H. ON SITE BURIAL 04 DESCRIPTION PROCESS WASTE, DECONTAMINATED DRUMS, CONTAIN RESIDUAL SOLIDS, LANDFILLED ON SITE	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> I. IN SITU CHEMICAL TREATMENT 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> J. IN SITU BIOLOGICAL TREATMENT 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> K. IN SITU PHYSICAL TREATMENT 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> L. ENCAPSULATION 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> M. EMERGENCY WASTE TREATMENT 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> N. CUTOFF WALLS 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> O. EMERGENCY DIKING/SURFACE WATER DIVERSION 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> P. CUTOFF TRENCHES/SUMP 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> Q. SUBSURFACE CUTOFF WALL 04 DESCRIPTION	02 DATE _____	03 AGENCY _____



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

IL 005104781

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☐ YES ☒ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

III. SOURCES OF INFORMATION (Cite specific references e.g., state laws, sample analysis reports)

## APPENDIX C

A. E. Staley

Target Compound List and  
Target Analyte List



## Target Compound List

### Volatiles

Chloromethane	1,2-Dichloropropane
Bromomethane	Cis-1,3-Dichloropropane
Vinyl Chloride	Trichloroethene
Chloroethane	Dibromochloromethane
Methylene Chloride	1,1,2-Trichloroethane
Acetone	Benzene
Carbon Disulfide	trans-1,3-Dichloropropane
1,1-Dichloroethene	Bromoform
1,1-Dichloroethane	4-Methyl-2-pentanone
1,2-Dichloroethene (total)	2-Hexanone
Chloroform	Tetrachloroethene
1,2-Dichloroethane	Toluene
2-Butanone	1,1,2,2-Tetrachloroethane
1,1,1-Trichloroethane	Chlorobenzene
Carbon Tetrachloride	Ethyl benzene
Bromodichloromethane	Styrene
	Xylenes (total)

Source: Target Compound List for water and soil with low or medium levels of volatile and semivolatile organic contaminants, as shown in the Quality Assurance Project Plan for Region V Superfund Site Assessment Program, BVWST, September 27, 1991.

## Target Compound List (continued)

### Pesticide/PCB

alpha-BHC	4,4-DDT
beta-BHC	Methoxychlor
delta-BHC	Endrin ketone
gamma-BHC (Lindane)	Endrin aldehyde
Heptachlor	alpha-chlordane
Aldrin	gamma-chlordane
Heptachlor epoxide	Toxaphene
Endosulfan I	Aroclor-1016
Dieldrin	Aroclor-1221
4,4-DDE	Aroclor-1232
Endrin	Aroclor-1242
Endosulfan II	Aroclor-1248
4,4-DDD	Aroclor-1254
Endosulfan sulfate	Aroclor-1260

Source: Target Compound List for water and soil containing less than high concentrations of pesticides/aroclor, as shown in the Quality Assurance Project Plan for Region V Superfund Site Assessment Program, BVWST, September 27, 1991.

### Target Analyte List

Aluminum	Magnesium
Antimony	Manganese
Arsenic	Mercury
Barium	Nickel
Beryllium	Potassium
Cadmium	Selenium
Calcium	Silver
Chromium	Sodium
Cobalt	Thallium
Copper	Vanadium
Iron	Zinc
Lead	Cyanide

Source: Target Analyte List in the Quality Assurance Project Plan for Region V Superfund Site Assessment Program, BVWST, September 27, 1991.

**Appendix D**

**Analytical Results**

**A. E. Staley Manufacturing Company**

Data Qualifiers		
Analysis	Qualifier	Definition
All	E	Reported value is estimated because of the presence of interference
	J	Estimated value
	N	Spiked sample recovery not within control limits
	U	Analyzed for but not detected
	R	Unusable data (Compound/analyte may or may not be present)
Organic Analysis	B	Reported value was obtained from a reading that was less than the Contract Required Quantitation Limit (CRQL) but greater than or equal to the Instrument Detection Limit (IDL)
Inorganic Analysis	B	Reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but greater than or equal to the Instrument Detection Limit (IDL)
	D	Compound identified in an analysis at a secondary dilution factor
	W	Post-digestion spike for Furnace AA analysis is out of control limits (85% -115%), while sample absorbance is less than 50% of spike absorbance
	*	Duplicate analysis not within control limits

Semivolatile Organic Analytical Results for Surface Soil  
A.E. Staley Manufacturing Company

Semivolatile Compound	Sample Location and Number Concentrations in ug/kg				
	SS01 (1)	SS02	SS03	SS04	SS05
Phenol	410 U	800 U	420 U	390 U	450 U
bis(2-Chloroethyl) Ether	410 U	800 U	420 U	390 U	450 U
2-Chlorophenol	410 U	800 U	420 U	390 U	450 U
1,3-Dichlorobenzene	410 U	800 U	420 U	390 U	450 U
1,4-Dichlorobenzene	410 U	800 U	420 U	390 U	450 U
1,2-Dichlorobenzene	410 U	800 U	420 U	390 U	450 U
2-Methylphenol	410 U	800 U	420 U	390 U	450 U
2,2'-Oxybis(1-Chloropropane)	410 U	800 U	420 U	390 U	450 U
4-Methylphenol	410 U	800 U	420 U	390 U	24 J
n-Nitroso-di-n-propylamine	410 U	800 U	420 U	390 U	450 U
Hexachloroethane	410 U	800 U	420 U	390 U	450 U
Nitrobenzene	410 U	800 U	420 U	390 U	450 U
Isophorone	410 U	800 U	420 U	390 U	450 U
2-Nitrophenol	410 U	800 U	420 U	390 U	450 U
2,4-Dimethylphenol	410 U	800 U	420 U	390 U	450 U
bis(2-Chloroethoxy)Methane	410 U	800 U	420 U	390 U	450 U
2,4-Dichlorophenol	410 U	800 U	420 U	390 U	450 U
1,2,4-Trichlorobenzene	410 U	800 U	420 U	390 U	450 U
Naphthalene	410 U	130 J	420 U	390 U	130 J
4-Chloroaniline	410 U	800 U	420 U	390 U	450 U
Hexachlorobutadiene	410 U	800 U	420 U	390 U	450 U
4-Chloro-3-Methylphenol	410 U	800 U	420 U	390 U	450 U
2-Methylnaphthalene	39 J	200 J	420 U	23 J	93 J
Hexachlorocyclopentadiene	410 UJ	800 UJ	420 UJ	390 UJ	450 UJ
2,4,6-Trichlorophenol	410 U	800 U	420 U	390 U	450 U
2,4,5-Trichlorophenol	1000 U	2000 U	1000 U	940 U	1100 U
2-Chloronaphthalene	410 U	800 U	420 U	390 U	450 U
2-Nitroaniline	1000 U	2000 U	1000 U	940 U	1100 U
Dimethyl Phthalate	410 U	800 U	420 U	390 U	450 U
Acenaphthylene	410 U	42 J	420 U	390 U	210 J

Semivolatile Organic Analytical Results for Surface Soil  
A.E. Staley Manufacturing Company

Semivolatile Compound	Sample Location and Number Concentrations in ug/kg				
	SS01 (1)	SS02	SS03	SS04	SS05
Benzo(a)Pyrene	140 J	1600	420 U	52 J	980
Indeno(1,2,3-cd)Pyrene	86 J	480 J	420 U	26 J	470
Dibenzo(a,h)Anthracene	410 U	130 J	420 U	390 U	150 J
Benzo(g,h,i)Perylene	90 J	440 J	420 U	28 J	410 J

Notes: 1) Background Sample

**Inorganic Analytical Results for Surface Soil  
A.E. Staley Manufacturing Company**

Metals and Cyanide	Sample Locations and Number Concentrations in ug/kg				
	SS01 (1)	SS02	SS03	SS04	SS05
Aluminum	11,900.00	7,640.00	22,800.00	9,730.00	14,600.00
Antimony	7.00 UJN	11.20 BNJ	6.40 UJN	6.10 UJN	6.90 JBN
Arsenic	5.90	10.90	12.00	3.50 J	8.90 J
Barium	134.00	93.70	169.00	92.80	166.00
Beryllium	0.88 B	0.89 B	0.71 B	0.72 B	0.77 B
Cadmium	0.78 U	0.83 U	0.71 U	0.67 U	0.72 U
Calcium	10,700.00 *	33,600.00 *	3,170.00 *	30,300.00 *	54,300.00 *
Chromium	15.20	13.10	23.20	14.40	21.80
Cobalt	10.50 B	5.50 B	13.00	5.50 B	10.10 B
Copper	21.60 *	34.80 *	25.80 *	17.40 *	33.00 *
Iron	23,600.00	22,600.00	34,600.00	18,300.00	29,900.00
Lead	31.90	66.20	16.00	12.10	26.50
Magnesium	2,360.00 J*	11,000.00 J*	4,390.00 J*	13,700.00 J*	20,500.00 J*
Manganese	822.00	311.00	568.00	284.00	537.00
Mercury	0.13 U	0.11 U	0.12 U	0.09 U	0.13 U
Nickel	17.70	20.20	24.60	16.00	30.90
Potassium	1,960.00 JE	1,530.00 JE	2,180.00 JE	1,830.00 JE	3,160.00 JE
Selenium	0.65 JBW	0.98 JB	0.49 UJW	0.47 UJW	0.76 JB
Silver	1.00 UJN	0.11 UJN	0.94 UJN	0.90 UJN	0.96 UJN
Sodium	613.00 JBE	405.00 JBE	123.00 JBE	510.00 JBE	491.00 JBE
Thallium	0.62 B	0.71 B	0.52 B	0.40 B	0.64 JBW
Vanadium	33.50	30.00	56.30	23.00	30.90
Zinc	186.00	186.00	96.20	78.00	122.00
Cyanide	0.99 *	1.30 U*	1.10 U*	1.40 U*	1.00 U*

Notes: 1) Background Sample

**Semivolatile Organic Analytical Results for Surface Water  
A.E. Staley Manufacturing Company**

Semivolatile Compound	Sample Location and Number Concentrations in ug/L		
	SW01 (1)	SW02	SW03
Phenol	10 U	10 U	10 U
bis(2-Chloroethyl)Ether	10 U	10 U	10 U
2-Chlorophenol	10 U	10 U	10 U
1,3-Dichlorobenzene	10 U	10 U	10 U
1,4-Dichlorobenzene	10 U	10 U	10 U
1,2-Dichlorobenzene	10 U	10 U	10 U
2-Methylphenol	10 U	10 U	10 U
2,2'-Oxybis(1-Chloropropane)	10 U	10 U	10 U
4-Methylphenol	10 U	10 U	10 U
n-Nitroso-di-n-propylamine	10 U	10 U	10 U
Hexachloroethane	10 U	10 U	10 U
Nitrobenzene	10 U	10 U	10 U
Isophorone	10 U	10 U	10 U
2-Nitrophenol	10 U	10 U	10 U
2,4-Dimethylphenol	10 U	10 U	10 U
bis(2-Chloroethoxy)Methane	10 U	10 U	10 U
2,4-Dichlorophenol	10 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U
Naphthalene	10 U	10 U	10 U
4-Chloroaniline	10 U	10 U	10 U
Hexachlorobutadiene	10 U	10 U	10 U
4-Chloro-3-Methylphenol	10 U	10 U	10 U
2-Methylnaphthalene	10 U	10 U	10 U
Hexachlorocyclopentadiene	10 UJ	10 UJ	10 UJ
2,4,6-Trichlorophenol	10 U	10 U	10 U
2,4,5-Trichlorophenol	25 U	25 U	25 U
2-Chloronaphthalene	10 U	10 U	10 U
2-Nitroaniline	25 U	25 U	25 U
Dimethyl Phthalate	10 U	10 U	10 U
Acenaphthylene	10 U	10 U	10 U
2,6-Dinitrotoluene	10 U	10 U	10 U
3-Nitroaniline	25 U	25 U	25 U
Acenaphthene	10 U	10 U	10 U
2,4-Dinitrophenol	25 UJ	25 UJ	25 UJ
4-Nitrophenol	25 UJ	25 UJ	25 UJ
Dibenzofuran	10 U	10 U	10 U
2,4-Dinitrotoluene	10 U	10 U	10 U
Diethylphthalate	10 U	10 U	10 U
4-Chlorophenyl Phenyl Ether	10 U	10 U	10 U
Fluorene	10 U	10 U	10 U
4-Nitroaniline	25 U	25 U	25 U
4,6-Dinitro-2-Methylphenol	25 UJ	25 UJ	25 UJ



**Pesticide and PCB Analytical Results for Surface Water  
A.E. Staley Manufacturing Company**

Pesticide/PCB	Sample Location and Number Concentrations in ug/L		
	SW01 (1)	SW02	SW03
Alpha – BHC	0.05 U	0.05 U	0.05 U
Beta – BHC	0.05 U	0.05 U	0.05 U
Delta – BHC	0.05 U	0.05 U	0.05 U
Gamma – BHC (Lindane)	0.05 U	0.05 U	0.05 U
Heptachlor	0.05 U	0.05 U	0.05 U
Aldrin	0.05 U	0.05 U	0.05 U
Heptachlor Epoxide	0.05 U	0.05 U	0.05 U
Endosulfan I	0.05 U	0.05 U	0.05 U
Dieldrin	0.10 U	0.10 U	0.10 U
4,4' – DDE	0.10 U	0.10 U	0.10 U
Endrin	0.10 U	0.10 U	0.10 U
Endosulfan II	0.10 U	0.10 U	0.10 U
4,4' – DDD	0.10 U	0.10 U	0.10 U
Endosulfan Sulfate	0.10 U	0.10 U	0.10 U
4,4' – DDT	0.10 U	0.10 U	0.10 U
Methoxychlor	0.50 U	0.50 U	0.50 U
Endrin Ketone	0.10 U	0.10 U	0.10 U
Endrin Aldehyde	0.10 U	0.10 U	0.10 U
Alpha – Chlordane	0.05 U	0.05 U	0.05 U
Gamma – Chlordane	0.05 U	0.05 U	0.05 U
Toxaphene	5.00 U	5.00 U	5.00 U
Aroclor – 1016	1.00 U	1.00 U	1.00 U
Aroclor – 1221	2.00 U	2.00 U	2.00 U
Aroclor – 1232	1.00 U	1.00 U	1.00 U
Aroclor – 1242	1.00 U	1.00 U	1.00 U
Aroclor – 1248	1.00 U	1.00 U	1.00 U
Aroclor – 1254	1.00 U	1.00 U	1.00 U
Aroclor – 1260	1.00 U	1.00 U	1.00 U

Notes: 1) Background Sample

**Semivolatile Organic Analytical Results for Surface Soil and Water**  
**Tentatively Identified Compounds**  
**A.E. Staley Manufacturing Company**

Compound Name	Retention Time	Estimated Concentration (ug/kg or ug/L)
<b>Sample SS01</b>		
Aldol Condensation Product	3.4	18,000 U
Unknown	3.7	130 U
Unknown	4.8	190 U
Unknown	5.5	300 J
Ethanol, 2-(2-ethoxyethoxy)-	5.6	200 U
Unknown	6.4	820 J
Unknown Acid	11.6	160 J
Unknown Hydrocarbon	14.3	130 J
Unknown Hydrocarbon	22.5	140 J
Unknown Hydrocarbon	25.0	150 J
Unknown	25.0	78 J
Unknown	25.2	86 J
Unknown	25.8	190 J
Unknown	26.4	300 J
Unknown	27.2	170 J
Unknown	27.6	96 J
<b>Sample SS02</b>		
Aldol Condensation Product	3.3	19,000 U
Unknown	6.4	720 J
Unknown Hydrocarbon	14.3	480 J
Unknown Polyaromatic Hydrocarbon	17.0	260 J
Unknown Polyaromatic Hydrocarbon	19.1	480 J
Unknown Polyaromatic Hydrocarbon	20.4	560 J
Unknown Polyaromatic Hydrocarbon	20.5	540 J
Unknown Polyaromatic Hydrocarbon	23.3	460 J
Unknown Polyaromatic Hydrocarbon	23.7	1,100 J
Unknown Polyaromatic Hydrocarbon	23.9	460 J
Unknown	25.0	360 J
Unknown	25.2	420 J
Unknown	25.4	360 J
Unknown Polyaromatic Hydrocarbon	25.8	480 J
Unknown	25.9	260 J
Unknown	26.0	440 J
Unknown	26.4	600 J
Unknown	26.8	280 J
Unknown	27.0	260 J
Unknown	27.3	280 J

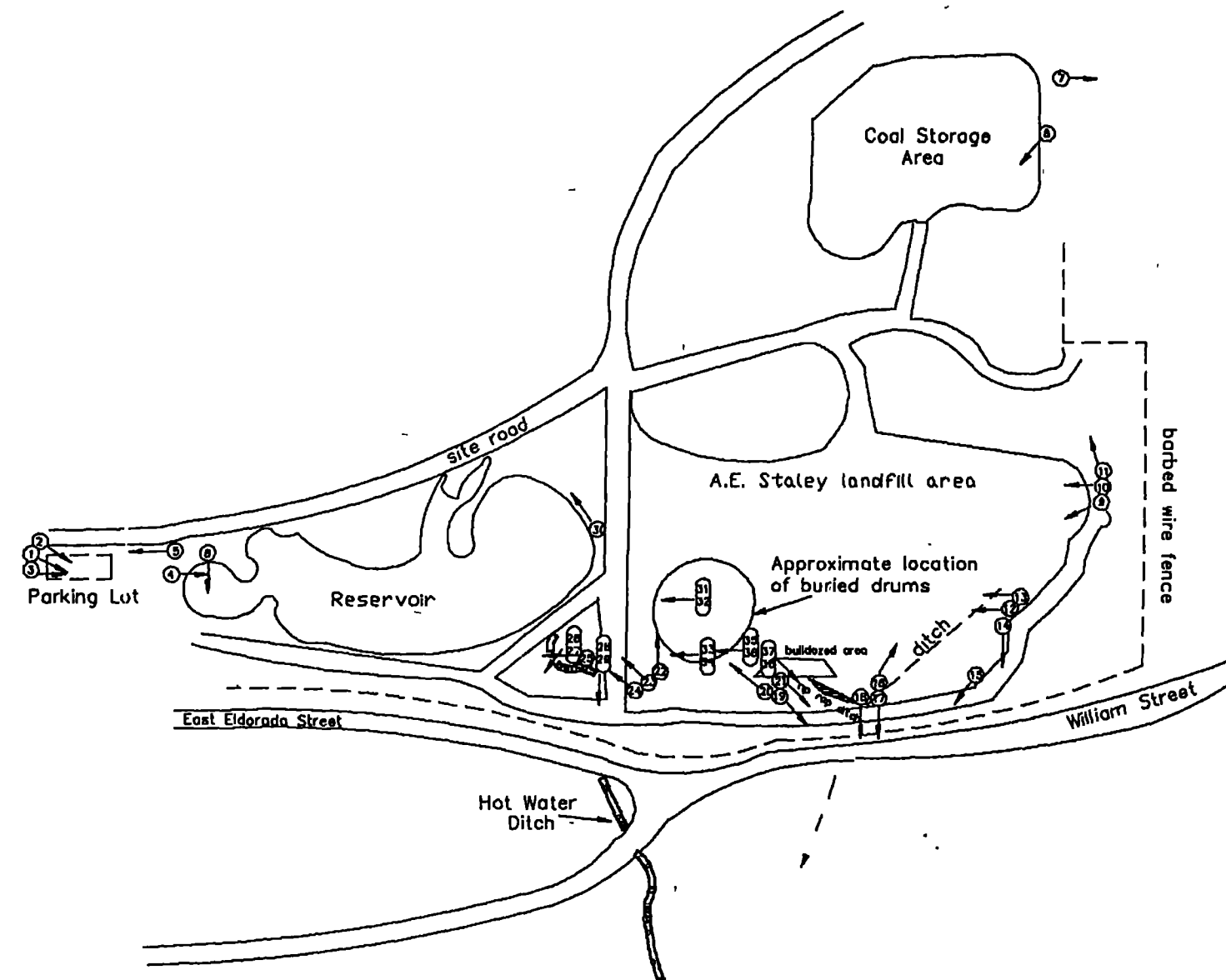
**Semivolatile Organic Analytical Results for Surface Soil and Water**  
**Tentatively Identified Compounds**  
**A.E. Staley Manufacturing Company**

Compound Name	Retention Time	Estimated Concentration (ug/kg or ug/L)
<b>Sample SS05</b>		
Aldol Condensation Product	3.3	26,000 U
Unknown Acid	11.5	360 J
Unknown Hydrocarbon	14.2	340 J
Unknown Acid	16.7	780 J
Unknown	18.4	150 J
Unknown Polyaromatic Hydrocarbon	18.9	170 J
Unknown	20.0	220 J
Unknown	20.7	150 J
Unknown Hydrocarbon	22.4	150 J
Unknown	23.2	200 J
Unknown Polyaromatic Hydrocarbon	23.5	340 J
Unknown Hydrocarbon	24.9	260 J
Unknown	25.1	150 J
Unknown Polyaromatic Hydrocarbon	25.4	100 J
Unknown	25.7	160 J
Unknown	25.9	96 J
Unknown Hydrocarbon	26.0	110 J
Unknown	26.2	320 J
Unknown	26.3	120 J
Unknown	26.6	180 J
<b>Sample SW01</b>		
Ethanol, 2-(2-ethoxyethoxy)-	5.7	17 U
<b>Sample SW02</b>		
Ethanol, 2-(2-ethoxyethoxy)-	5.7	17 U
<b>Sample SW03</b>		
Ethanol, 2-(2-ethoxyethoxy)-	5.7	17 U

**Appendix E**

**Photographs**

**A. E. Staley Manufacturing Company**



Source:  
Modified from IEPA, 1990

Scale:  
Not to Scale



Photo Location Map

A.E. Staley Manufacturing Company  
Decatur, Illinois

B&V Waste Science and Technology Corp.

**Date:** 9-17-91

**Time:** Not Recorded

**Photo Taken By:** T. Moody

**Photo Number:** 01

**Location/ILD #:** A.E. Staley  
ILD005104781

**Direction of Photo:** Southwest

**Description:** Lot where drums  
are stored.



**Date:** 9-17-91

**Time:** Not Recorded

**Photo Taken By:** T. Moody

**Photo Number:** 02

**Location/ILD #:** A.E. Staley  
ILD005104781

**Direction of Photo:** Southwest

**Description:** Lot where drums  
are stored.





Date: 9-17-91

Time: Not Recorded

Photo Taken By: T. Moody

Photo Number: 03

Location/ILD #:  
ILD005104781

Direction of Photo: East

Description: South end of lot  
where drums are stored.



Date: 9-17-91

Time: Not Recorded

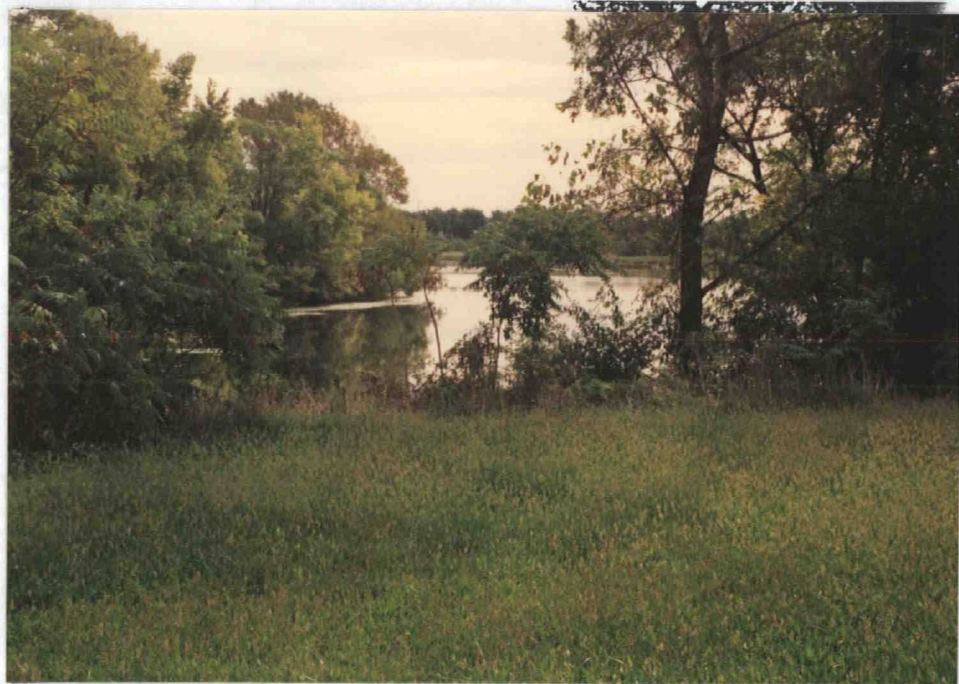
Photo Taken By: T. Moody

Photo Number: 04

Location/ILD #:  
ILD005104781

Direction of Photo: East

Description: View of reservoir  
at southern edge of drum lot.





Date: 9-17-91

Time: Not Recorded

Photo Taken By: T. Moody

Photo Number: 05

Location/ILD #:  
ILD005104781

Direction of Photo: West

Description: Staley property;  
tall building rising above  
trucks to left is the main  
office.



Date: 9-17-91

Time: Not Recorded

Photo Taken By: T. Moody

Photo Number: 06

Location/ILD #:  
ILD005104781

Direction of Photo: South

Description: Edge of reservoir  
(behind trees).





**Date:** 9-17-91

**Time:** Not Recorded

**Photo Taken By:** T. Moody

**Photo Number:** 07

**Location/ILD #:** A.E. Staley  
ILD005104781

**Direction of Photo:** East

**Description:** Farm land  
northeast of property.



**Date:** 9-17-91

**Time:** Not Recorded

**Photo Taken By:** T. Moody

**Photo Number:** 08

**Location/ILD #:** A.E. Staley  
ILD005104781

**Direction of Photo:** Southwest

**Description:** View of site.  
Photo from berm around coal  
storage area.





Date: 9-17-91

Time: Not Recorded

Photo Taken By: T. Moody

Photo Number: 09

Location/ILD #: A.E. Staley  
ILD005104781

Direction of Photo: Southwest

Description: Standing at  
eastern portion of property;  
trees just northeast of landfill  
area.



Date: 9-17-91

Time: Not Recorded

Photo Taken By: T. Moody

Photo Number: 10

Location/ILD #: A.E. Staley  
ILD005104781

Direction of Photo: West

Description: East of property  
looking at trees and bare  
patches just north of landfill.





Date: 9-17-91

Time: Not Recorded

Photo Taken By: T. Moody

Photo Number: 11

Location/ILD #: A.E. Staley  
ILD005104781

Direction of Photo: North

Description: Standing  
northeast of landfill,  
residential area northeast of  
property.



Date: 9-17-91

Time: Not Recorded

Photo Taken By: T. Moody

Photo Number: 12

Location/ILD #: A.E. Staley  
ILD005104781

Direction of Photo: West

Description: Standing at  
southeastern end of landfill.  
The landfill is on the other  
side of the trees.





**Date:** 9-17-91

**Time:** Not Recorded

**Photo Taken By:** T. Moody

**Photo Number:** 13

**Location/ILD #:** A.E. Staley  
ILD005104781

**Direction of Photo:** West

**Description:** Standing at  
southeastern end of landfill  
(landfill just beyond trees).



**Date:** 9-17-91

**Time:** Not Recorded

**Photo Taken By:** T. Moody

**Photo Number:** 14

**Location/ILD #:** A.E. Staley  
ILD005104781

**Direction of Photo:** Southwest

**Description:** Fenced border  
near residential area  
(southwest of landfill).





Date: 9-17-91

Time: Not Recorded

Photo Taken By: T. Moody

Photo Number: 15

Location/ILD #: A.E. Staley  
ILD005104781

Direction of Photo: Southwest

Description: Southwest part of  
landfill on right (manhole in  
background).



Date: 9-17-91

Time: Not Recorded

Photo Taken By: T. Moody

Photo Number: 16

Location/ILD #: A.E. Staley  
ILD005104781

Direction of Photo: Northeast

Description: Onsite ditch  
associated with manhole.





**Date:** 9-17-91

**Time:** Not Recorded

**Photo Taken By:** T. Moody

**Photo Number:** 17

**Location/ILD #:** A.E. Staley  
ILD005104781

**Direction of Photo:** South

**Description:** Onsite ditch  
flowing under Williams Street.



**Date:** 9-17-91

**Time:** Not Recorded

**Photo Taken By:** T. Moody

**Photo Number:** 18

**Location/ILD #:** A.E. Staley  
ILD005104781

**Direction of Photo:** South

**Description:** Onsite ditch  
flowing under Williams Street.





Date: 9-17-91

Time: Not Recorded

Photo Taken By: T. Moody

Photo Number: 19

Location/ILD #: A.E. Staley  
ILD005104781

Direction of Photo: Southeast

Description: Bulldozed area  
on southeast portion of  
landfill, where erosion is said  
to have been a problem.



Date: 9-17-91

Time: Not Recorded

Photo Taken By: T. Moody

Photo Number: 20

Location/ILD #: A.E. Staley  
ILD005104781

Direction of Photo: Northwest

Description: Bulldozed area  
on southeast portion of  
landfill, where erosion is said  
to have been a problem.





Date: 9-17-91

Time: Not Recorded

Photo Taken By: T. Moody

Photo Number: 21

Location/ILD #: A.E. Staley  
ILD005104781

Direction of Photo: Southeast

Description: Bulldozed area  
on southeast portion of  
landfill, where erosion is said  
to have been a problem.



Date: 9-17-91

Time: Not Recorded

Photo Taken By: T. Moody

Photo Number: 22

Location/ILD #: A.E. Staley  
ILD005104781

Direction of Photo: Northwest

Description: Top of landfill.





**Date:** 9-17-91

**Time:** Not Recorded

**Photo Taken By:** T. Moody

**Photo Number:** 23

**Location/ILD#:** A.E. Staley  
ILD005104781

**Direction of Photo:** Northwest

**Description:** Top of landfill.



**23**

**Date:** 9-17-91

**Time:** Not Recorded

**Photo Taken By:** T. Moody

**Photo Number:** 24

**Location/ILD #:** A.E. Staley  
ILD005104781

**Direction of Photo:** Northwest

**Description:** View from  
landfill to Hot Water Ditch.



**24**



Date: 9-17-91

Time: Not Recorded

Photo Taken By: T. Moody

Photo Number: 25

Location/ILD #:  
ILD005104781

Direction of Photo: West

Description: Sampling station  
at head of Hot Water Ditch.



Date: 1-7-92

Time: 1030

Photo Taken By: R. Reints

Photo Number: 26

Location/ILD #:  
ILD005104781

Direction of Photo: North

Description: BVWST  
representatives collect samples  
upstream (north) of sampling  
station.





Date: 1-7-92

Time: 1120

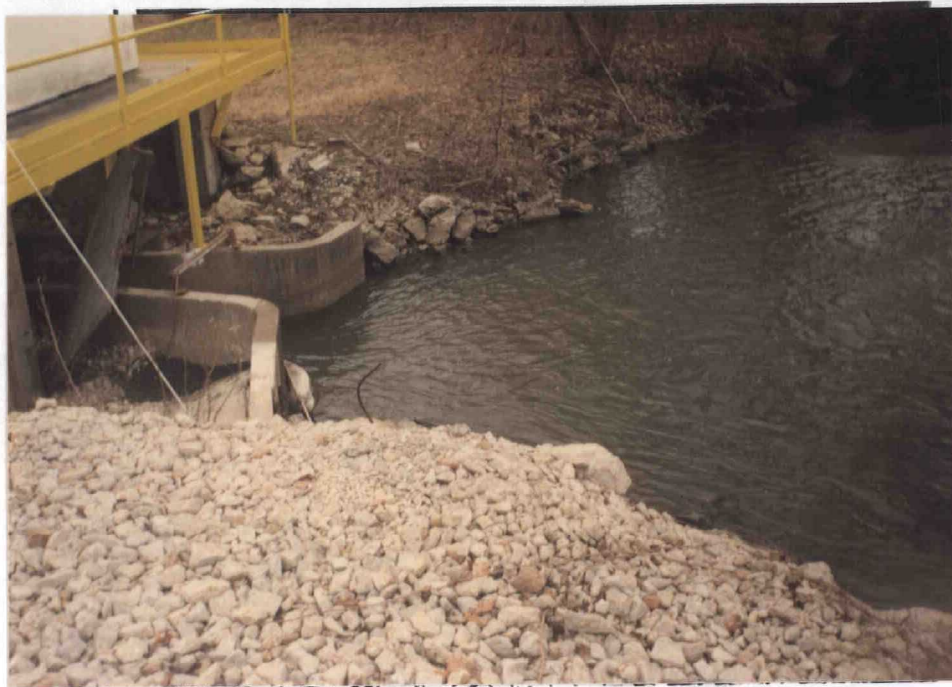
Photo Taken By: R. Reints

Photo Number: 27

Location/ILD #: A.E. Staley  
ILD005104781

Direction of Photo: North

Description: SWO1 sample  
location, nest to spillway.



Date: 1-7-92

Time: 1145

Photo Taken By: R. Reints

Photo Number: 28

Location/ILD #: A.E. Staley  
ILD005104781

Direction of Photo: North

Description: SWO2 sample  
location, just upstream from  
the culvert.





Date: 1-7-92

Time: 1145

Photo Taken By: R. Reints

Photo Number: 29

Location/ILD #: A.E. Staley  
ILD005104781

Direction of Photo: North

Description: SWO3 sample  
location just upstream from  
the culvert.



Date: 1-7-92

Time: 1300

Photo Taken By: R. Reints

Photo Number: 30

Location/ILD #: A.E. Staley  
ILD005104781

Direction of Photo: Southeast

Description: SSO1 sample  
location.



Date: 1-7-92

Time: 1315

Photo Taken By: R. Reints

Photo Number: 31

Location/ILD #: A.E. Staley  
ILD005104781

Direction of Photo: East

Description: SSO2 sample  
location.



Date: 1-7-92

Time: 1315

Photo Taken By: R. Reints

Photo Number: 32

Location/ILD #: A.E. Staley  
ILD005104781

Direction of Photo: East

Description: SSO2 sample  
locations.





Date: 1-7-92

Time: 1325

Photo Taken By: R. Reints

Photo Number: 33

Location/ILD #: A.E. Staley  
ILD005104781

Direction of Photo: East

Description: SSO3 sample  
location.



Date: 1-7-92

Time: 1325

Photo Taken By: R. Reints

Photo Number: 34

Location/ILD #: A.E. Staley  
ILD005104781

Direction of Photo: East

Description: SSO3 sample  
location.



Date: 1-7-92

Time: 1330

Photo Taken By: R. Reints

Photo Number: 35

Location/ILD #: A.E. Staley  
ILD005104781

Direction of Photo: East

Description: SSO4 sample  
location.



Date: 1-7-92

Time: 1330

Photo Taken By: R. Reints

Photo Number: 36

Location/ILD #: A.E. Staley  
ILD005104781

Direction of Photo: East

Description: SSO4 sample  
location.





Date: 1-7-92

Time: 1335

Photo Taken By: R. Reints

Photo Number: 37

Location/ILD #: A.E. Staley  
ILD005104781

Direction of Photo: West

Description: SSO5 sample  
location.



Date: 1-7-92

Time: 1335

Photo Taken By: R. Reints

Photo Number: 38

Location/ILD #: A.E. Staley  
ILD005104781

Direction of Photo: West

Description: SSO5 sample  
location.





**Date:** 1-8-2

**Time:** 1130

**Photo Taken By:** R. Reints

**Photo Number:** 39

**Location/ILD #:** A.E. Staley  
ILD005104781

**Direction of Photo:** None

**Description:** Cooler of packed  
samples. Note chain of  
custody on lid of cooler.



Town **Decatur** Township **Decatur** R. **3E**  
 Company **C. Griffy** No. **20** T. **16N** Sec. **7**  
 Farm **A.E. Staley Mfg. test**  
 Authority **Wabash Railway Co.**  
 Elevation  
 Collector

Confidential Date Drilled **July 2, 1942**  
**1100' S. line, 1150' W. line of sec.**

No.	Strata	Thickness		Depth	
		Feet	In.	Feet	In.
	Original returned to Wabash Railway Co., Decatur, Illinois				
	Top soil	2		2	
	Clay, yellow	13		15	
	Clay, yellow; sand	30		45	
	Cemented sand and blue clay very hard	61		106	
	Lime rock				
	Size mud pit -- length $3\frac{1}{2}$ ; width $3\frac{1}{2}$ ; depth $3\frac{1}{2}$				
	Water bearing formation data: 0-106'; Wt. mud lbs. per gal. - water; 36" mud taken from pit				
	No loose formation				

NO ENVELOPE

COUNTY No. 347

COUNTY **Macon**

**7-16N-3E**

Town **Decatur** Township **Decatur** R. **3E**  
 Company **C. Griffy** No. **21** T. **16N** Sec. **7**  
 Farm **A.E. Staley Mfg. Co. test**  
 Authority **Wabash Railway Co.**  
 Elevation  
 Collector

Confidential Date Drilled **July 3, 1942**  
**1550' S. line, 1500' W. line of sec.**

No.	Strata	Thickness		Depth	
		Feet	In.	Feet	In.
	Original returned to Wabash Ry., Decatur				
	Clay and gravel fill	20		20	
	Yellow clay and sand	15		35	
	Clay, blue; sand, cemented	38		73	
	Sand, fine, gray, loose	9		82	
	Sand, gray, dirty, tight	18		100	
	Size mud pit: length 3; width 3; depth 3				
	Water bearing formation data:				
	Depth Wt. mud lbs. per gal.				
	0-73 water				
	73-82				
	82-100				
	Have 9' of water bearing sand, slightly dirty, requires no mud for drilling				

Inches mud taken  
from pit  
12"  
8"  
3"

COUNTY No. 348

NO ENVELOPE

COUNTY **Macon**

**7-16N-3E**

Town Decatur Township 16N-3E Map No. 10  
 Company Tony Lentz No. 3E  
 Farm Downs, John No. 3E  
 Authority Tony Lentz, Elgin  
 Elevation 1041  
 Collector 1041  
 Confidential


Sec. 18  
Twp. 16  
R. 3E

Date Drilled 1041

No.	Strata	Thickness		Depth	
		Feet	In.	Feet	In.
	Lot 70, Lake Grove Club				
	Top soil fill	10	0	10	4
	Clay, yellow	10	0	20	
	Clay, blue	10	0	30	
	Sand and gravel	10	0	40	
	Clay, blue	10	0	50	2
	Sand and gravel	10	0	60	8
	Clay, blue	10	0	70	0
	Sand, fine	10	0	80	7
	Sand and gravel	10	0	90	

COUNTY No. 397

NO ENVELOPE

COUNTY Macon  
DRILL RECORD

INDEX NO. 1018  
18-16N-3E

# LOG OF WATER WELL

Property owner CARL F. CRUMBERT Well No. 1

Drilled by T. R. HANKE Year 1946

Formations passed through	Thick- ness	Depth of Bottom
<u>Soil</u>	<u>1</u>	<u>1</u>
<u>YELLOW CLAY</u>	<u>25</u>	<u>26</u>
<u>SANDY GRAY CLAY</u>	<u>3</u>	<u>31</u>
<u>BROWN DRIFT</u>	<u>11</u>	<u>42</u>
<u>GRAY CLAY</u>	<u>22 1/2</u>	<u>64 1/2</u>
<u>" SAND VERY FINE</u>	<u>5</u>	<u>69</u>
<u>" CLAY</u>	<u>2</u>	<u>71</u>
<u>" SAND</u>	<u>4 1/2</u>	<u>75 1/2</u>
<u>" CLAY</u>	<u>1 1/2</u>	<u>76</u>

(Continue on back if necessary)

Finished in SAND at 76 to 78 ft.

Cased with 3 inch CAST IRON from 0 to 75'6" ft.

and — inch — from — to — ft.

Size hole below casing 3 inch. Static level from surf. 43 ft.

Tested capacity 2 gal. per min. Temperature 55 °F.

Water lowered to 76 ft. in — hrs. 5 min.

Length of test 2 hrs. — min. Screen 1" x 1" x 1"

Slot 1/4" Diam 2 Length 8' 1/2" Bottom set at 78 ft.

[Show location in Section Plat]

Township name DECATUR Elev. — Sec. 18

Description of location LOT 49 Twp. 16

LAKE GROVE CLUB ADD Rge. 3E

Signed T. R. HANKE County Macon

Copy for Illinois State Geological Survey Index: 18-16N-3E

NO ENVELOPE

18-16N-3E

NO.

NO.

### ELEVATION

NW NE

COUNTY No. 400

NO ENVELOPE

COUNTY **Macon**

**SAMPLE SET NO.**  
**(21169-20M-9-46)**

18-16N-3E

ILLINOIS GEOLOGICAL SURVEY, URBANA

Town Decatur

Township Decatur

R. 3 E

Company

No.

T.

Sec.

Farm A.E. Staley Mfg. Co. test No. 10 16N

Authority Wabash Railway Co.

Elevation

Collector

Confidential

Date Drilled 1942

750' from S. line, 1050' from W. line of sec.


18

No.	Strata	Thickness		Depth	
		Feet	In.	Feet	In.
	Co. No. 402				
	Original returned to Wabash Ry. Co., Decatur On lake shore by Becker underpass				
	Sand, yellow	4		4	
	Clay	10		14	
	Sand, yellow, clay showing	13		27	
	Gray sand and clay, boulders	5		32	
	Sand, gray, hard; limerock at 39'	7		39	
	No. 11, 800' from S. line, 1100' from W. line				
	Sand, yellow	4		4	
	Clay, sandy	10		14	
	Sand, yellow	13		27	
	Sand, gray, packed, clay showing Co. No. 403	11	6	38	6
	No. 12, 200' from S. line, 1450' from W. line S and E side B & O parking across from pumping station				
	Cinder fill and trash	27		27	
	Sand, gray and clay	5		32	
	Sand, brown, fine gravel and clay	8		40	
	Sand, fine, gray, packed, mucky	13	6	53	6
	NO ENVELOPE				
	COUNTY No. 404				

COUNTY Macon

18-16N-3E

(40430-20M)

ILLINOIS GEOLOGICAL SURVEY, URBANA

(3-43) 2

Town Decatur

Township Decatur

R. 3 E

Company

No.

T.

Sec.

Farm A.E. Staley Mfg. Co. Test No. 18 16N

Authority Wabash Railway Co., Decatur

Elevation

Collector

Confidential

Date Drilled 1942

50' from N. line, 900' from E. line of sec.


18

No.	Strata	Thickness		Depth	
		Feet	In.	Feet	In.
	N. center of Mosher tract				
	Clay, yellow	6		6	
	Clay, blue, hard	12		18	
	Sand, gray, fine, gravel and clay, hard	18		36	
	Sand, fine, gray, and clay, hard	8		44	
	COUNTY No. 410				
	NO ENVELOPE				

COUNTY Macon

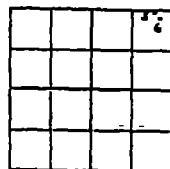
18-16N-3E

(40430-20M)

ILLINOIS GEOLOGICAL SURVEY, URBANA

(3-43) 2

Town Decatur Township Decatur No. 10  
Company L. R. Burt  
Farm Spence Kellogg & Sons, Inc. T. 16  
Authority L. R. Burt N  
Elevation  
Collector  
Confidential Date Drilled 1941



No.	COUNTY No. 344 Strata	Thickness		Depth	
		Feet	In.	Feet	In.
	WELL #5				
	40' N. line, 500' E. line				
	Top soil	5		5	
	Clay, yellow	10		15	
	Clay, blue	25		40	
	Clay, tough, blue	25		65	
	Sand, some gravel	10		75	
	Sand and gravel	19		94	
	Clay, blue	5		99	
	10" diameter 94' deep				
	15' Armco str #125 slot				
	WELL #6				
	200' N. line, 450' E. line				
	Top soil	5		5	
	Clay, yellow	10		15	
	Clay, blue	47		62	
	Sand and gravel	26		88	
	10" diameter 88' deep				
	15' Armco str. 5' #100 slot, 10' #125 slot				
	S.S.# 17739				
	COUNTY No. 345				
	NO ENVELOPE				

COUNTY Macon  
DRILL RECORD

INDEX NO. 1007  
7-16N-3E

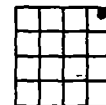
(12880-20M)

ILLINOIS GEOLOGICAL SURVEY, URBANA

(12-41)

## GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner ADM Corn Sweeteners Well No. \_\_\_\_\_  
Address 4066 Faries Parkway Decatur IL  
Driller Grosch, Wayne A. License No. 102-2557  
11. Permit No. 139239 Date 09/02/88  
12. Water from \_\_\_\_\_ 13. County Macon  
at depth \_\_\_\_\_ to \_\_\_\_\_ ft. Sec. 7  
14. Screen: Diam. \_\_\_\_\_ in. Twp. 16 N  
Length: \_\_\_\_\_ ft. Slot \_\_\_\_\_ Rge. 3 E  
Elev. \_\_\_\_\_



15. Casing and Liner Pipe NE NE NE			
Diam. (in.)	Kind and Weight	From (ft)	To (ft)

16. Size hole below casing: \_\_\_\_\_ in.  
17. Static level \_\_\_\_\_ ft. below casing top which is \_\_\_\_\_ ft.  
above ground level. Pumping level \_\_\_\_\_ ft. when pumping at \_\_\_\_\_  
gpm for \_\_\_\_\_ hours.

18.	Formations passed through	Thickness	Bottom
	SS #66608 (0'-95')	0	0
	top soil	2	2
	brown clay	23	25
	rusty brown sand	4	29
	blue clay	5	34
	fine sand	1	35
	brown clay	18	53
	fine sand	2	55
	blue clay	2	57

Industrial

Macon

12-115-22071-00

07-16N-03E

# LOG OF WATER WELL

Property owner RE. FULK Well No. 1  
 Drilled by T. R. HANKS Year 1946

Formations passed through	Thick- ness	Depth of Bottom
SOIL	1	1
YELLOW CLAY	19	20
CLAY	21	41
GREEN	7	48
YELLOW SAND	2	50
YELLOW CLAY	3	53
CLAY	2	55
COUNTY No. <u>338</u>		

[Continue on back if necessary]  
 Finished in SAND at 52' to 70' ft.  
 Cased with 3 inch PIPE from 0 to 70' ft.  
 and 3 inch from — to — ft.  
 Size hole below casing 3 inch. Static level from surf. 59 ft.  
 Tested capacity 9 gal. per min. Temperature 52 °F.  
 Water lowered to 60 ft. in. in 2 hrs. — min.  
 Length of test 2 hrs. 30 min. Screen C.M.  
 Slot 1 Diam. 2 Length 6 Bottom set at 50 ft.

[Show location in Section Plat]  
 Township name DECATUR Elev. — Sec. 7  
 Description of location LOT #1 Twp. 16N  
WESMIT ADD. Rge. 3E

Signed T. R. HANKS County Macon  
 Copy for Illinois State Geological Survey Index: 7-16N-3E

TOWN Decatur TOWNSHIP Whitmore  
 COMPANY L. R. Burt NO. #1  
 FARM Spencer Kellogg & Sons, Inc.  
 AUTHORITY L. R. Burt, Decatur, Ill. 16  
 ELEVATION N

CONFIDENTIAL DATE DRILLED March 1940  
200' N. line, 200' E. line

MAP No. 10  
 R. 3E  
 SEC. 7


NO	STRATA	THICKNESS		DEPTH	
		FEET	IN.	FEET	IN.
	Top soil, black	5		5	
	Clay, yellow	23		28	
	Yellow sand and gravel	3		31	
	Clay, blue, tough	14		45	
	Clay, blue, soft, with sand and gravel	20		65	
	Sand, blue, some gravel	5		70	
	Sand, blue, and gravel	10		80	
	Coarser sand and gravel, blue	10		90	
	Coarse sand and gravel	6		96	
	Clay, blue	1		97	
	10" well				
	78' of casing				
	440 gal. per min. 8 hrs.				
	Permanent pump installed with a capacity of 120 gal. per min., drawdown - 4'				
	9 1/2" O.D. Strainer-- 21' 9"				
	10' of 100 slot at bottom				
	10' of 80' slot at top				
	S.S.# 17737				
	NO ENVELOPE				
	COUNTY No. <u>340</u>				

COUNTY Macon  
 DRILL RECORD  
 (A 6572--15M--10-30)

INDEX NO. 1007  
 7-16N-3E

ILLINOIS GEOLOGICAL SURVEY, URBANA

Town Decatur Township Decatur R. 3 E  
 Company C. Griffy No. T. Sec.  
 Farm A.E. Staley Mfg. Co. test No. 28 16N 7  
 Authority Wabash Railway Co.

Elevation

Collector

Confidential Date Drilled July 14, 1942

1800' from N. line, 1800' from E. line of sec.

No.	Strata	Thickness		Depth	
		Feet	In.	Feet	In.
	Original returned to Wabash Ry. Co., Decatur				
	Top soil	4		4	
	Clay, yellow	10		14	
	Sand, brown	26		40	
	Gray sand and gravel with clay, tight	23		63	
	Gray sand and gravel, fairly loose but showing some clay	10		73	
	Cemented sand and clay, very hard	24		97	
	Size mud pit: length 4; width 4; depth 3				
	Water bearing formation data:				
	Depth Wt. mud per gal. In. mud taken from pit				
	0-65 water		8"		
	65-75 water		8"		
	75-97 water		4"		
	Formation from 63-73' is water bearing				

COUNTY No. 355

NO ENVELOPE

COUNTY Macon

7-16N-3E

(40430-20M)

ILLINOIS GEOLOGICAL SURVEY, URBANA

(3-43)

Town Decatur Township Decatur R. 3 E  
 Company C. Griffy No. T. Sec.  
 Farm A.E. Staley Mfg. Co. test No. 29 16N 7  
 Authority Wabash Railway Co.

Elevation

Collector

Confidential Date Drilled July 15, 1943

400' from N. line, 1300' from E. line of sec.

No.	Strata	Thickness		Depth	
		Feet	In.	Feet	In.
	Original returned to Wabash Ry. Co., Decatur				
	Top soil	3		3	
	Clay, yellow	14		17	
	Sand, brown	18		35	
	Sand and clay, dirty, but not packed	45		80	
	Cemented sand and clay, hard	16		96	
	Size mud pit: length 4; width 4, depth 3½				
	Water bearing formation data:				
	Depth Wt. mud per gal. Mud taken from pit				
	0-50 water		2'		
	50-96 water		18"		
	Test boring No. 29 is 12' of center of N. 35th St. and 355' S. of center of Ferries Parkway St.				

COUNTY No. 356

NO ENVELOPE

COUNTY Macon

7-16N-3E

(40430-20M)

ILLINOIS GEOLOGICAL SURVEY, URBANA

(3-43)



Town Decatur Township Decatur R. 3E  
 Company C. Griffy No. T. Sec.  
 Farm A.E. Staley Mfg. Co. test No. 24 16 7  
 Authority Wabash Railway Co. N  
 Elevation  
 Collector

Confidential Date Drilled July 9, 1942  
 2350' from S. line, 2600' from E. line of sec.

No.	Strata	Thickness		Depth	
		Feet	In.	Feet	In.
	Original returned to Wabash Railway, Decatur				
	Cinders	10		10	
	Sand, brown	15		25	
	Sand, fine, gray, packed	15		40	
	Sand and gravel, packed, showing of blue clay	33		73	
	Sand and gravel, loose, showing of clay	7		80	
	Cemented sand and clay, very hard	23		103	
	Size mud pit: length 3; width 3; depth 3				
	Surface water kept coming into our pit so we have no check on amount of water absorbed by formation, although there was no formation loose enough to absorb water except 73 to 80 ft. and that had showing of clay.				
	COUNTY No. 351				
	NO ENVELOPE				

Town Decatur Township Decatur R. 3E  
 Company C. Griffy No. T. Sec.  
 Farm A.E. Staley Mfg. Co. test No. 25 16 7  
 Authority Wabash Railway Co. N  
 Elevation  
 Collector

Confidential Date Drilled July 10, 1942  
 2450' from S. line, 2300' from E. line of sec.

No.	Strata	Thickness		Depth	
		Feet	In.	Feet	In.
	Original returned to Wabash Railway Co., Decatur, Illinois				
	Top soil	3		3	
	Clay, yellow	17		20	
	Clay, blue, hard pan	25		45	
	Sand, gravel, and blue clay, hard	35		80	
	Gravel with blue clay, soft	12		92	
	Blue clay and gravel, very hard	13		105	
	Size mud pit: length 3; width 3; depth 3				
	Water bearing formation data: 0-105', wt. mud lbs. per gal. - water; 20" mud taken from pit				
	Enough blue clay in formation to cause mud to get heavier as we go down.				
	COUNTY No. 352				
	NO ENVELOPE				